

invention detects which of these two kinds of signals are provided to the apparatus and performs the appropriate decoding operation based upon a determination made in a detector. As noted above, Fig. 3 shows the two kinds of data and the two decoding operations.

The claims have been amended hereby to emphasize the above-noted features of the present invention.

Lee et al. relates to a portable data recorder that detects when a non-sound signal is being input and generates time data that is recorded. Thus, rather than let the memory fill up with no actual sounds, the area at which the non-sound data would be recorded is simply identified by the time data. As noted in column 4 of Lee et al., non-sound time data corresponds to sections having no audio signal recorded and coincides with the number of blocks that is represented by the so-called block unit codes. If it is determined that there is a length of time in which no signal is being input, then the number corresponding to that time is recorded rather than the actual non-sound data. Lee et al. is not confronted with the situation of the present invention in which a signal to be processed may be compressed and encoded in a first fashion or may be uncompressed and encoded in a linear fashion, such as PCM.

Wakai et al. relates to a system for use in commercial

airlines to provide passenger entertainment and includes a signal processing system having a so-called Manchester decoder. As noted by the examiner, at column 21 of Wakai et al. it is stated that the decoder decodes the serial audio data into non-return to zero format and detects a unique data pattern used for system synchronization. The data encoded in the non-return to zero format is then fed out of the decoder.

It is respectfully submitted that the non-return to zero code of Wakai et al. does not correspond to the zeros that continue for a predetermined period of time in the present invention and that are used to determine whether the input audio data signal is in a compressed data state or an uncompressed data state. Furthermore, it is not seen how the non-return to zero decoder of Wakai et al. could be combined in the system of Lee et al. to render obvious a system, such as now recited in the amended claims.

Reconsideration is respectfully requested of the rejection of claims 5, 11, and 12 under 35 USC 103 as being unpatentable over Lee et al. in view of Schnizlein.

Claim 5 depends from independent claim 1 and claims 11 and 12 depend from independent claim 7, which independent claims are thought to be patentably distinct over the cited references as discussed above.

Schnizlein is cited for its showing of providing a mute signal when an all zeroes condition is detected.

Nevertheless, Schnizlein is silent concerning the features of the present invention relating to detecting a kind of compression or encoding applied to a signal and then operating accordingly, in accordance with a detected synchronization signal. Therefore, it is respectfully submitted that claims 5, 11, and 12 are also patenably distinct over the cited reference.

Notice is respectfully taken of the indication that claim 10 contains allowable subject matter. Claim 10 has been amended hereby to place it in independent form by including therein all of the recitations previously found in claim 7.


Accordingly, in view of the amendments made to the claims hereby, as well as the above remarks, it is respectfully submitted that an audio data signal processing method and apparatus for use with a playback apparatus that can process supplied audio data that can be in the compressed state and encoded in the one manner or an uncompressed state and encoded in another manner, as taught by the present invention and as recited in the amended claims, is neither shown nor suggested in the cited references, alone or in combination.

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Favorable reconsideration is earnestly solicited.

Respectfully submitted,

COOPER & DUNHAM LLP

A handwritten signature in dark ink, appearing to read "Jay H. Maioli". The signature is fluid and cursive, with the first name "Jay" and last name "Maioli" clearly distinguishable.

Jay H. Maioli
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VERSION WITH MARKINGS TO SHOW CHANGES MADE
IN THE CLAIMS

Please amend claims 1, 7, and 10 by rewriting same to read as follows.

--1. (Four Times Amended) An audio data signal processing method, in which a supplied audio data signal can be in one of a compressed data state and an uncompressed data state, for performing a process for decoding the supplied audio data signal, comprising the steps of:

detecting whether zero data continues for a predetermined period of time in said supplied audio data signal;

determining, when zero data are detected to continue for said predetermined period of time, that said supplied audio data are in the compressed [audio] data[;]] state and determining, when zero data is not detected to continue for said predetermined period of time, that said supplied audio data are in the uncompressed state; and

performing a first decoding operation on said supplied audio data[,] when said supplied audio data are determined to be in the compressed data state in said step of determining and

[wherein when zero data continuing for said predetermined period of time is not detected, it is determined that] performing a second decoding operation when said supplied audio data are determined to be in the uncompressed data state and said supplied data are [non-compressed audio data, and said decoding operation is performed, and] determined to be in the uncompressed data state in said step of determining,

wherein upon detection that zero data continue for said predetermined period of time, said decoding is performed by switching said supplied audio data signed to said first

decoding operation based on a sync signal of said supplied audio data signal.

--7. (Twice Amended) An audio signal [processing] processor for an optical disc reproducing apparatus that supplies an audio data signal that can be in one of a compressed data state and an uncompressed data state, the processor comprising:

detection means for detecting whether zero data continue for a predetermined period of time in said supplied audio data signal;

determining means for determining that said supplied audio data signal is in the compressed [audio] data state when [the] a result of detection by said detection means is that zero data continues for said predetermined period of time and for determining that said supplied audio data signal is in the uncompressed data state when zero data is not detected to continue for said predetermined period of time; and

decoding means for performing a first decoding operation or a second decoding operation of said supplied audio data based on the result of said determination by said determining means,

wherein when said detection means detects that zero data continue for said predetermined period of time, said decoding means switches to said first decoding [based on a sync signal of said supplied data,] operation and decodes said supplied audio data in the compressed data state using a sync signal of the supplied audio data signal, and

wherein said determining means determines that said supplied audio data are [non-compressed audio] in the uncompressed data state when zero data are not detected continuously for said predetermined period of time and said decoding means performs said second decoding operation.

--10. (Twice Amended) [The] An audio signal processing apparatus [described in claim 9] comprising:

detection means for detecting whether zero data continue for a predetermined period of time in supplied data;

determining means for determining that said supplied data is compressed audio data when the result of detection by said detection means is that zero data continues for said predetermined period of time; and

decoding means for decoding said supplied data based on the result of said determination by said determining means,

wherein when said detection means detects that zero data continue for said predetermined period of time, said decoding means switches to said decoding based on a sync signal of said supplied data, and decodes said supplied data, and

wherein said determining means determines that said supplied data are uncompressed audio data when zero data are not detected continuously for said predetermined period of time,

wherein said decoding means includes a memory for storing said supplied audio data for said predetermined period of time during which it is determined whether zero data are continuously detected, and when it is determined that said supplied data are [non-compressed] uncompressed audio data, said audio signal processing apparatus outputs the data decoded from said supplied data following the output data decoded by said decode means from said audio data stored in said memory.